

In The Claims:

Please replace the previously presented claim set with the following replacement claim set:

1. (Currently Amended) A method of enhancing the stability of a particulate suspension comprising an aqueous phase containing substantially no miscible organic solvent having suspended therein an agrochemical solid substantially insoluble in said aqueous phase, said method comprising: which comprises

(i) forming a polymeric stabiliser having a hydrophilic moiety and a hydrophobic moiety by polymerising a plurality of vinylic monomers, not being exclusively vinylic esters or their hydrolysed products, at least some of which contain functional groups capable of undergoing cross-linking reactions; and

(ii) reacting said the polymeric stabiliser with one or more substances contained (~~dissolved or suspended~~) in the aqueous phase capable of undergoing a cross-linking reaction with said the functional groups,

wherein the ratio by weight of (a) the polymeric stabiliser prior to cross-linking to (b) the suspended agrochemical solid is less than 1 part of polymeric stabiliser per 5 parts of suspended agrochemical solid.

2-21. (Canceled)

22. (Currently Amended) A particulate suspension comprising a liquid phase having suspended therein a solid substantially insoluble in said liquid phase, wherein the suspension is stabilised by the reaction product of:

(i) a polymeric stabiliser having a hydrophilic moiety and a hydrophobic moiety and comprising a plurality of vinylic monomers, not being exclusively of vinylic esters or of their hydrolysed products, at least some of which contain functional groups capable of undergoing cross-linking nucleophilic or condensation reactions, and

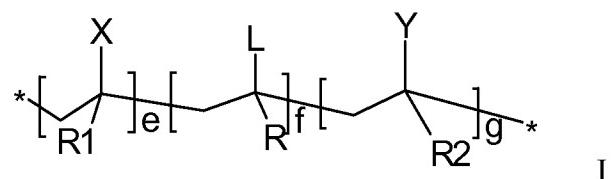
(ii) one or more substances contained in the liquid phase capable of undergoing a cross-linking reaction with said functional groups;

wherein the ratio by weight of (a) the polymeric stabiliser prior to cross-linking to (b) the suspended solid is less than 1 part of polymeric stabiliser per 5 parts of suspended solid by weight.

23. (New) A particulate suspension according to claim 22, wherein the suspended solid comprises an agrochemical solid.

24. (New) A particulate suspension according to claim 23, wherein the agrochemical solid has a particle size of from 1 to 10 microns.

25. (New) A particulate suspension according to claim 22, wherein said polymeric stabiliser is represented by the general formula (I):



wherein:

one * represents a residue of an initiator group and the other * represents a residue of a terminator group;

R1, R and R2 are each independently H or methyl;

X is a hydrophilic moiety;

L is a moiety containing a cross-linking group;

Y is a hydrophobic moiety;

e ranges from 0 to 0.8;

f ranges from 0.05 to 0.4;

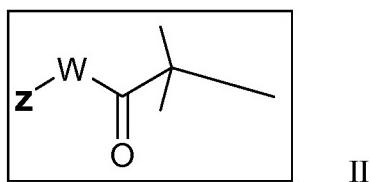
g ranges from 0.10 to 0.90; and

e + f + g equals 1;

provided that when e is 0, at least one * represents the residue of a hydrophilic initiator.

26. (New) A particulate suspension according to claim 25, wherein e ranges from 0.005 to 0.35, and f ranges from 0.01 to 0.4.

27. (New) A particulate suspension according to claim 25, wherein one * represents the residue of a hydrophilic initiator and said residue has the formula



wherein Z is a hydrophilic group selected from C₁ to C₄ alkoxypolyethylene glycol, phenoxy polyethylene glycol, poly(acrylamide), poly(vinyl pyrrolidone) or poly(methyl vinyl ether), and -W- is -O- or -NA- wherein A is hydrogen or a C₁ to C₄ alkyl group.

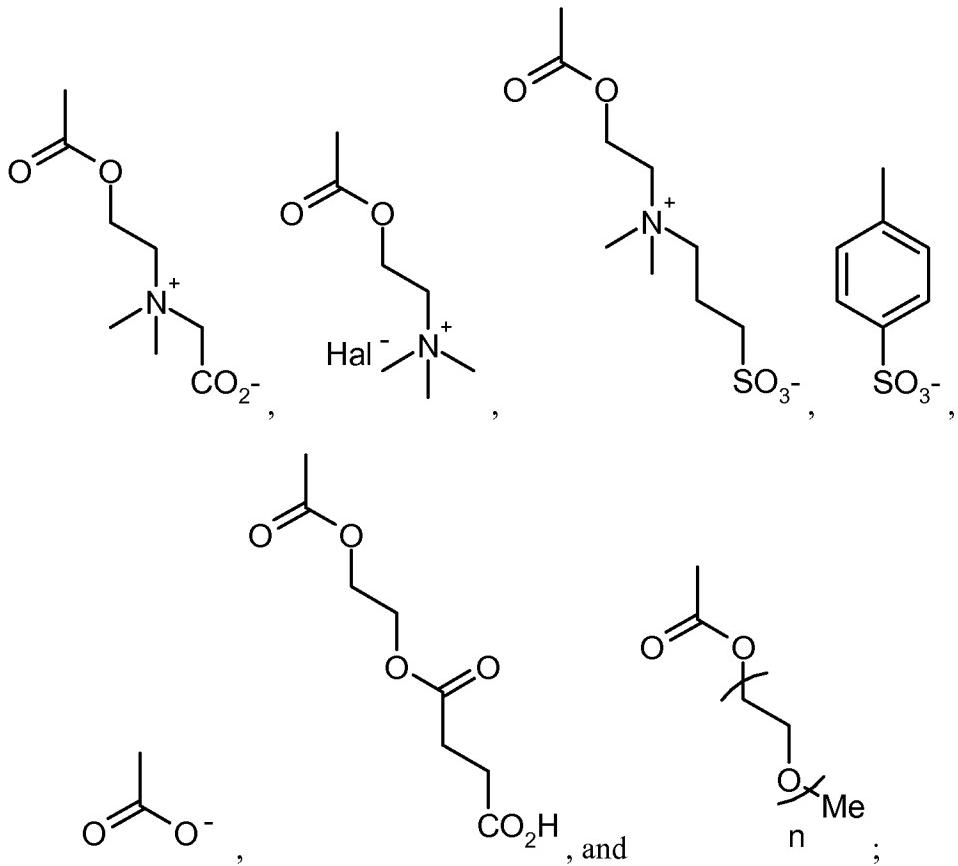
28. (New) A particulate suspension according to claim 25, wherein:

-X is or carries a hydrophilic moiety X' selected from -SO₃⁻; polyethylene glycol optionally end-capped with C₁-C₄ alkyl; -COOH or a salt thereof; carboxybetaine; sulfobetaine; and a quaternary ammonium salt -N⁺R³₃C⁻ wherein each R³ is independently H or C₁-C₄ alkyl or -CH₂CH₂OH;

-L is or carries a cross-linking group L' selected from -OH; -SH; -NHA where A is hydrogen or C₁-C₄ alkyl; and -COOH or a salt thereof, and

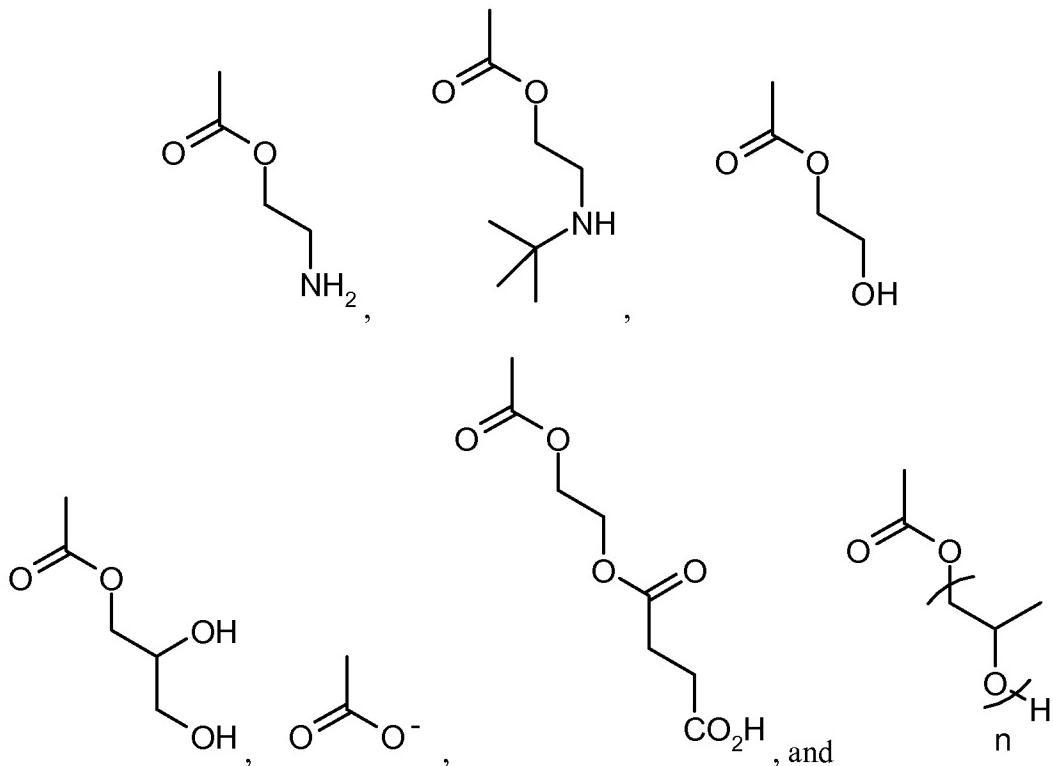
-Y is or carries a hydrophobic moiety Y' selected from -CO-O-(Si(CH₃)₂O)_n-H wherein n is from 3 to 20; -CO-O-polypropylene glycol; -CO-O-A wherein A is a C₁-C₁₂ alkyl group, cycloalkyl group, alkylcycloalkyl group, aralkyl group or alkylaryl group; and -CONHB wherein B is a C₅-C₁₂ alkyl group.

29. (New) A particulate suspension according to claim 28, wherein -X is selected from the groups:



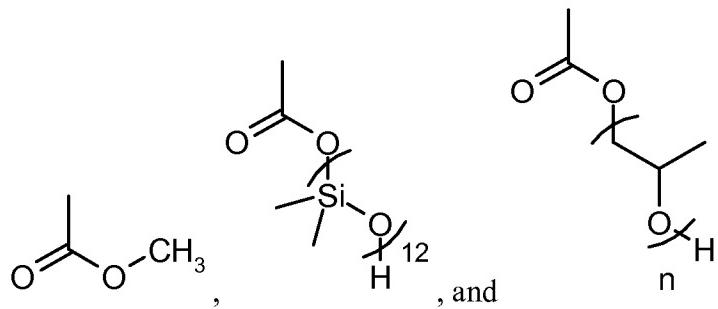
wherein n indicates an average degree of polymerisation of a polyethylene glycol chain and is from 5 to 100.

30. (New) A particulate suspension according to claim 28, wherein -L is selected from the groups:



wherein n indicates a degree of polymerisation of a propylene glycol and is from 5 to 50.

31. (New) A particulate suspension according to claim 28, wherein -Y is selected from the groups:



wherein n indicates a degree of polymerisation of a propylene glycol and is from 5 to 50.

32. (New) A particulate suspension according to claim 22, wherein said polymeric stabiliser comprises:

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(i) a hydrophilic moiety derived from one or more vinylic monomers selected from 2-(N,N-dimethyl-N-(2-methacryloxyethyl) ammonium)ethanoic acid; 2-(trimethylammonium)ethyl methacrylate salt; 3-(N,N-dimethyl-N-(2-methacryloxyethyl) ammonium)propyl-sulphonic acid; the sodium salt of methacrylic acid; mono-2-(methacryloyloxy)ethyl succinate; mono-methoxy poly(ethylene glycol) mono-methacrylate; styrene-4-sulfonic acid; 4-vinylbenzyl trimethyl ammonium chloride; 2-N-morpholinoethyl; 2-methacryloxyethylphosphonate methacrylate; 2-acrylamido-2-methylpropane sulphonic acid; mono-methoxy-PEO-(meth)acrylate; acrylamide; vinyl pyrrolidone; 2-sulphoethyl methacrylate; 2-acrylamido-2-methylpropane sulphonic acid; quaternary salts of dimethylaminoethyl methacrylate (DMAEMA) and of dimethylaminoethyl acrylate or DMAEMA at acid pHs; 2-(trimethylammonium)ethyl methacrylate iodide; 2-(N,N-dimethyl-N-(2-methacryloxyethyl) ammonium)ethanoic acid; and styrene-4-sulfonic acid;

(ii) a moiety that possesses reactive or cross-linking ability with respect to said one or more substances contained in said aqueous phase of said suspension and capable of undergoing a cross-linking reaction with said functional group and being derived from one or more vinylic monomers selected from 2-aminoethyl methacrylate; 2-(tert-butylamino) ethyl methacrylate; 2-hydroxyethyl methacrylate; 2,3-dihydroxypropyl methacrylate; the sodium salt of methacrylic acid; mono-2-(methacryloyloxy)ethyl succinate; poly(propylene glycol) mono-methacrylate; 2-aminoethyl methacrylate hydrochloride; N-(3-aminopropyl)methacrylamide hydrochloride; 4-aminostyrene; 2-(iso-propylamino)ethylstyrene; 4-N-(vinylbenzyl)aminobutyric acid; 3-(N-styrylmethyl-2-aminoethylamino)-propyltrimethoxysilane hydrochloride; N-(3-methacryloxy-2-hydroxypropyl)-3-aminopropyltriethoxysilane; 2-methoxy-4-vinylphenol; 4-vinylbenzyl alcohol; 4-vinylphenol; 2,6-dihydroxymethyl-4-methoxystyrene; 3,5-dimethoxy-4-hydroxystyrene; 2-hydroxy-3-methacryloxypropyl trimethyl ammonium chloride; 3-chloro-2-hydroxypropyl methacrylate; 3-hydroxypropyl methacrylate; 2-hydroxy-3-phenoxypropyl methacrylate; diethylene glycol mono-methacrylate; 2-methacryloxyethyl glucoside; sorbitol methacrylate; caprolactone 2-methacryloxyethyl ester; 4-hydroxybutyl methacrylate; 2-hydroxypropyl methacrylate; acrylic acid; beta-carboxyethylacrylic acid; 4-vinylbenzoic acid; 4-((3-methacryloxy)propoxy)benzoic acid; mono-(2-(methacryloxy)ethyl)phthalate itaconic acid;

minated derivatives of polymerized acrylic acid, beta-carboxyethylacrylic acid, 4-vinylbenzoic acid, 4-((3-methacryloxy)propoxy)benzoic acid, mono-(2-(methacryloxy)ethyl)phthalate or itaconic acid; and glycidyl (meth)acrylate reacted with alkylamines; and

(iii) a hydrophobic moiety derived from one or more vinylic monomers selected from methyl methacrylate; poly(dimethylsiloxane); mono-methacrylate; and poly(propylene glycol) mono-methacrylate.

33. (New) A particulate suspension according to claim 25, wherein (i) said polymeric stabilizer is a random graft or comb copolymer having a hydrophobic backbone and hydrophilic arms; (ii) R¹ is -H or methyl; (iii) -X is a group -CO-Z' where Z' is methoxy-(polyethylene glycol) having a degree of polymerisation (DPn) of 5-100 such that the moieties -CO-Z' form said hydrophilic arms of said random graft or comb copolymer; and (iv) remaining monomer units form the hydrophobic backbone which comprises cross-linking moieties L.

34. (New) A particulate suspension according to claim 33, wherein e ranges from 0.1 to 0.5, f ranges from 0.01 to 0.4, and g ranges from 0.1 to 0.9.

35. (New) A particulate suspension according to claim 27, wherein (i) said polymeric stabilizer is a block copolymer comprising a hydrophilic block and a hydrophobic block; (ii) said hydrophilic block comprising said residue having formula (II), a hydrophilic unit (-CH₂CR¹X-), or both; (iii) said hydrophilic block comprising randomly or sequentially copolymerised units (-CH₂CR₂Y-) and cross-linking units (-CH₂CH₂CRL-).

36. (New) A particulate suspension according to claim 35, wherein f + g ranges from 0.2 to 1.0, and a ratio of g:f is from 1:2 to 1:10.

37. (New) A particulate suspension according to claim 35, wherein:

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(a) when said functional group on said polymeric stabiliser is hydroxyl or thiol, said one or more substances comprises an isocyanate, an ester, an epoxide, a divinylsulphone, or a glycerol triglycidyl ether;

(b) when said functional group on said polymeric stabiliser is -NHA wherein A is hydrogen or a C₁ to C4 alkyl group, said one or more substances comprises an isocyanate, an acetoacetoxy group, an aldehyde, an acrylate, a vinylsulphone, an epoxide, glycerol triglycidyl ether; glycerol propoxylate triglycidyl ether; trimethylolpropane triacrylate; trimethylolpropane propoxylate triacrylate, glutaric dialdehyde, 2-(acetoacetoxy) ethyl acrylate, or 1,4-butandiol diacetoacetate; and

(c) when said functional group on said polymeric stabiliser is an acid reactive group, said one or more substances comprises an isocyanate, an aziridine or a carbodiimide.

38. (New) A particulate suspension according to claim 37, wherein said functional group on said polymeric stabiliser is hydroxyl or thiol or -NHA, and said one or more substances comprises an isocyanate wherein the isocyanate is selected from m-phenylene diisocyanate; 1-chloro-2,4-phenylene diisocyanate; 4,4'-methylenebis(phenyl isocyanate); 3,3'dimethyl-4,4'-biphenylene diisocyanate 4,4'-methylenebis(2-methylphenyl isocyanate); 3,3'dimethoxy-4,4'biphenylene diisocyanate; 2,4-tolylene diisocyanate; 2,6-tolylenediisocyanate; tetramethyl-4,4'-biphenylene diisocyanate; isophorone diisocyanate; hexane-1,6-diisocyanate; tetramethylene xylene diisocyanate; α ,4-tolylene diisocyanate; tolylene 2,5-diisocyanate; 2,4,6-trimethyl-1,3-phenylene diisocyanate; poly(ethylene adipate) tolylene 2,4-diisocyanate terminated; poly(isophorone diisocyanate); poly(propylene glycol) tolylene 2,4-diisocyanate terminated; poly(1,4-butanediol) tolylene diisocyanate terminated; 1,8-diisocyanatoctane; poly(hexamethylene diisocyanate); poly(tolylene 2,4-diisocyanate); poly(tetrafluoroethylene oxide-co-difluoromethylene oxide) α,ω -diisocyanate; 1,4-diisocyanatobutane; 1,3-phenylene diisocyanate; 1,4-phenylene diisocyanate; trans-1,4-cyclohexylene diisocyanate; m-xylylene diisocyanate; α,α -dimethyl- α ,4-phenylethyl diisocyanate; 4-bromo-6-methyl-1,3-phenylene diisocyanate; 4-chloro-6-methyl-1,3-phenylene

diisocyanate; poly(1,4-butanediol) isophorone diisocyanate terminated; 3,3'-dimethyl-4,4'-biphenylene diisocyanate; and 1,3-bis(1-isocyanato-1-methylethyl)benzene.

39. (New) A particulate suspension according to claim 22, wherein the ratio by weight of (a) the polymeric stabiliser prior to cross-linking to (b) the suspended solid is from 1 part of polymeric stabiliser to 200 parts of suspended solid to 1 part of polymeric stabiliser per 10 parts of suspended solid.

40. (New) A particulate suspension comprising:

(a) a liquid phase;

(b) a reaction product of:

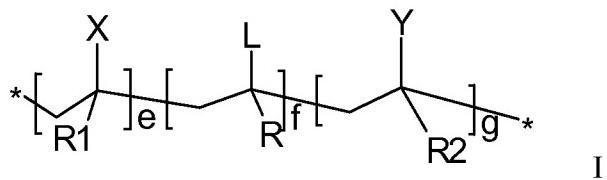
(i) a polymeric stabiliser having a hydrophilic moiety and a hydrophobic moiety and comprising a plurality of vinylic monomers, not being exclusively of vinylic esters or of their hydrolysed products, at least some of which contain functional groups capable of undergoing cross-linking nucleophilic or condensation reactions, and

(ii) one or more substances contained in the liquid phase capable of undergoing a cross-linking reaction with said functional groups; and

(c) an agrochemical solid that is substantially insoluble in said liquid phase and suspended within said liquid phase via said reaction product;

wherein the ratio by weight of (a) the polymeric stabiliser prior to cross-linking to (b) the suspended agrochemical solid is less than 1 part of polymeric stabiliser per 5 parts of suspended agrochemical solid by weight.

41. (New) A particulate suspension according to claim 40, wherein said polymeric stabiliser is represented by the general formula (I):



wherein:

one * represents a residue of an initiator group and the other * represents a residue of a terminator group;

R1, R and R2 are each independently H or methyl;

X is a hydrophilic moiety;

L is a moiety containing a cross-linking group;

Y is a hydrophobic moiety;

e ranges from 0 to 0.8;

f ranges from 0.05 to 0.4;

g ranges from 0.10 to 0.90; and

e + f + g equals 1;

provided that when e is 0, at least one * represents the residue of a hydrophilic initiator; and said one or more substances comprises an isocyanate.

42. (New) A particulate suspension according to claim 41, wherein -X comprises

